



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,033	11/21/2005	Olivier Monsacre	S1022.81211US00	4685
46329	7590	08/18/2008		
STMicroelectronics Inc. c/o WOLF, GREENFIELD & SACKS, P.C. 600 Atlantic Avenue BOSTON, MA 02210-2206				
EXAMINER				
ZEWARI, SAYED T				
ART UNIT		PAPER NUMBER		
2617				
MAIL DATE		DELIVERY MODE		
08/18/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/526,033

**Applicant(s)**

MONSACRE, OLIVIER

**Examiner**

SAYED T. ZEWAR

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 7, 8, 11, 16-22 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 8, 11, 16-22 and 24 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's arguments filed on 05/19/2008 have been fully considered but they are not persuasive.
2. Applicant argues that ***"Applicant respectfully points out that Thompson does not provide an antenna being fixed to a removable battery. Rather, the antenna is fixed to an application module (see reference number 100 on FIG. 10 of Thompson), the application module being insertable into a cell phone for enhancing functionality of the device by incorporating a number of independent electrical components together. As noted in column 15, lines 29-34 of Thompson, the application module has an electrical circuit that includes a power supply located thereon, instead of the power supply being located on the cell phone. In this respect, the antenna of Thompson is not fixed directly to a removable battery of the cell phone."*** This argument is not persuasive. The combinations of references used disclose all these limitations. Thompson discloses a power supply and an antenna directly fixed on a same module. This module is removable from cell phone and contains a battery. Thus the battery is removable from the cell phone also. Further, all cell phones contain removable battery. It would be clear to put the Thompson's invention and a removable battery together.
3. Applicant argues that ***"In particular, the power supply that the Examiner refers to in Thompson does not provide primary electrical power to the cell***

**phone"** This argument is not persuasive. Thompson discloses a battery for a module.

This module provides functions to the cell phone. Therefore Thompson's battery is providing power to cell phone. Further, all cell phones contain removable battery. It would be clear to put the Thompson's invention and a removable battery together.

4. Therefore, the combinations of references used disclose all the limitations of the claims of the applicant.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 7, 16-18, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito (US 2001/0,006,902) in view of Launay (US 6,111,303) in further in view of Thompson et al. (US 5,335,276).

With respect to claim 1, Ito discloses a communication system (**See Ito's abstract, figure 2, section [0035]-[0037]**) comprising the following steps:

- supply of equipment fitted with at least one antenna and at least two pins connected to the antenna (**See Ito's abstract, figure 2(12), [0032]-[0037]**);
- supply of a smart card with a chip (**See Ito's abstract figure 2(21, 22), section**

**[0035]-[0037] where presence of processor, memory render the card a smart card)**  
supplied with:

- at least two surface pins **(See Ito's figure 2(signal pins))**;
- a processing module **(See Ito's abstract figure 2(21), section [0035]-[0037])**;
- a radio-frequency interface associated with the processing module and connected to the surface pins of the card **(See Ito's abstract, figure 2(12), [0032]-[0037])**, the surface pins of the card inherently being coupled to the pins of equipment **(See Ito's figure 2(21f), [0037])**; However, Ito does not specifically disclose the connection between the surface pins of the card and the antenna. In analogous art, Launay discloses a connection between the surface pins of the card and the antenna for the purpose of providing a non-contact electronic card **(See Launay's abstract, figure 1(11, 12), col.3 lines 31-36)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito by combining with the invention of Launay, thereby providing a non-contact electronic card, as disclosed by Launay **(See Launay's col.1 lines 56-59)**. Further Ito and Launay do not specifically disclose the equipment to be a cell phone; and a removable battery, the antenna being fixed directly to the removable battery. In analogous art, Thompson et al. discloses these limitations providing a removable battery for providing primary electrical power to the cell phone, where to the antenna is fixed **(See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito and Launay by combining it with Thompson, thereby providing a

removable battery where the antenna is fixed to the removable battery, as disclosed by **(See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36).**

With respect to claim 7, Ito discloses equipment with an antenna and a coupling interface coupleable to a smart card **(See Ito's abstract, figure 2, section [0035]-[0037])**. However, Ito does not specifically disclose the coupling interface has two pins coupleable to surface pins of a smart card; and the pins of the equipment are connected to the antenna. In analogues art, Launay discloses a connection between the surface pins of the card and the antenna providing a non-contact electronic card **(See Launay's abstract, figure 1(11, 12), col.3 lines 31-36)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito by combining with the invention of Launay, thereby providing a non-contact electronic card, as disclosed by Launay **(See Launay's col.1 lines 56-59)**. Further Ito and Launay do not specifically disclose the equipment to be a cell phone; and a removable battery for providing primary electrical power to the cell phone, the antenna being directly fixed to the removable battery. In analogues art, Thompson et al. discloses these limitations **(See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito and Launay and combine with Thompson for the purpose of providing a removable battery where the antenna is fixed to the removable battery, as disclosed by **(See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36)**.

With respect to claim 17, Ito discloses a communications process comprising: providing equipment having an antenna adapted to inherently transmit and/or receive signals for use by the equipment (**See Ito's abstract, figure 2(12, 26), section [0033], and [0036]**); providing a smart card having a chip, a contact, a processing module and a radio- frequency interface associated with the processing module and connected to the contact, with the contact being connected to the antenna (**See Ito's abstract figure 2(21, 20, signal pins, and CONNECTOR), section [0035]-[0037]**); and transmitting electrical signals between the card and the antenna via the contact (**See Ito's abstract figure 2(21, 20, signal pins, and CONNECTOR), section [0035]-[0037]**). However, Ito does not specifically disclose the equipment to be a cell phone; and a removable battery for providing primary electrical power to the cell phone, the antenna being fixed to the removable battery. But Thompson et al. discloses these limitations (**See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito and combine with Thompson, thereby providing a removable battery where the antenna is fixed directly to the removable battery, as disclosed by (**See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36**).

With respect to claim 20, Ito discloses a communication system (**See Ito's abstract, figure 2, section [0035]-[0037]**) comprising:  
a smart card having a radio-frequency interface (**See Ito's abstract figure 2(20, 21, 12), section [0035]-[0037]**); equipment inherently communicating with the smart card,

the equipment having an antenna adapted to transmit and/or receive signals for use by the external equipment (**See Ito's abstract figure 2(20, 21, 12), section [0035]-[0037] where the smart card is provided RF module and antenna to inherently communicate with an external equipment**). However, Ito does not specifically disclose that the radio-frequency interface of the smart card connected to the antenna of the equipment wherein signals from the radio-frequency interface are transmitted to the antenna of the external equipment to increase a communication range of the smart card. But Launay discloses a connection between the surface pins of the card and the antenna (**See Launay's abstract, figure 1(11, 12), col.3 lines 31-36**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito and combine with the invention of Launay, thereby providing a non-contact electronic card, as disclosed by Launay (**See Launay's col.1 lines 56-59**). Further Ito and Launay do not specifically disclose the equipment to be a cell phone; and a removable battery, the antenna being fixed to the removable battery. But Thompson et al. discloses these limitations (**See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito and Launay and combine with Thompson, thereby providing a removable battery electrically coupleable to the cell phone for providing primary electrical power to the cell phone where the antenna is fixed directly to the removable battery, as disclosed by (**See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36**).



With respect to claim 16, Ito discloses a equipment wherein the antenna is active **(See Ito's abstract figure 5(29), section [0012], [0054]-[0056] where amplifier is employed, thus making the antenna active)**. However, Ito does not specifically disclose the equipment to be a cell phone. But Thompson et al. discloses this limitation **(See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito and combine with Thompson, thereby providing a removable battery where the antenna is fixed to the removable battery, as disclosed by **(See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36)**.

With respect to claim 18 and 21, Ito discloses surface contacts and transmitting signals between RF module and antenna module. However, Ito does not specifically discloses providing the smart card with at least two unused surface contacts; and transmitting electrical signals between the at least two unused surface contacts and the antenna. But Launay discloses a connection between the surface pins of the card and the antenna **(See Launay's abstract, figure 1(11, 12), col.3 lines 31-36)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito and combine with the invention of Launay, thereby providing a non-contact electronic card, as disclosed by Launay **(See Launay's col.1 lines 56-59)**.

7. Claims 2, 8, 19, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito (US 2001/0,006,902) in view of Launay (US 6,111,303) and Thompson et al. (US 5,335,276) and further in view of Rydbeck (US 5,778,322).

With respect to claim 2, Ito discloses a communication system wherein a smart card is disclosed (**See Ito's abstract, figure 2, section [0035]-[0037]**). Ito and Launay do not disclose the format of the smart card to be ISO standard 7816-2 and wherein the surface pins of the card are pins C4 and C8. In analogues art, Rydbeck discloses this limitation (**See Rydbeck's abstract, figure 1 and 2, col.5 lines 49-67, col.6 lines 1-3**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito by combining with the invention of Rydbeck for the purpose of providing the use of an ISO standard 7816-2 smart card, as disclosed by Rydbeck (**See Rydbeck's abstract, figure 1 and 2, col.5 lines 49-67, col.6 lines 1-3**).

With respect to claim 8, Ito discloses a equipment wherein a smart card is disclosed (**See Ito's abstract, figure 2, section [0035]-[0037]**). Ito and Launay do not disclose the pins on the equipment can be coupled to pins C4 and C8 of a smart card in the ISO standard 7816-2 format and the equipment to be a cell phone. In analogues art, Thompson et al. discloses this limitation (**See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito by combining with Thompson, thereby providing a removable battery where the

antenna is fixed to the removable battery, as disclosed by Thompson (**See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36**). Further, Ito, Thompson, and Launay do not disclose the format of the smart card to be ISO standard 7816-2 and wherein the surface pins of the card are pins C4 and C8. In analogues art, Rydbeck discloses this limitation (**See Rydbeck's abstract, figure 1 and 2, col.5 lines 49-67, col.6 lines 1-3**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito, Thompson and Launay by combining with the invention of Rydbeck, thereby providing the use of an ISO standard 7816-2 smart card, as disclosed by Rydbeck (**See Rydbeck's abstract, figure 1 and 2, col.5 lines 49-67, col.6 lines 1-3**).

With respect to claim 24, Ito discloses a communication system wherein a smart card and its use with external equipment is disclosed (**See Ito's abstract, figure 2, section [0035]-[0037]**). Ito and Launay do not disclose the equipment is a cell phone. In analogues art, Thompson et al. discloses this limitation (**See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito and Launay by combining with Thompson, thereby providing a cell phone with removable battery where the antenna is fixed to the removable battery, as disclosed by (**See Thompson's figure 10, figure 2, 4 and 5, col.15 lines 29-67, col.16 lines 1-36**).

With respect to claim 19 and 22, Ito and Launay disclose smart card with surface contacts for transmitting signals to antenna. However, Ito and Launay do not specifically

disclose providing the smart card in ISO standard 7816 and providing contacts as contacts C4 and C8. However, Ito does not specifically disclose the format of the smart card to be ISO standard 7816. But Rydbeck discloses this limitation (**See Rydbeck's abstract, figure 1 and 2, col.5 lines 49-67, col.6 lines 1-3**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito and combine with the invention of Rydbeck, thereby providing the use of an ISO standard 7816 smart card, as disclosed by Rydbeck (**See Rydbeck's abstract, figure 1 and 2, col.5 lines 49-67, col.6 lines 1-3**).

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito (US 2001/0,006,902) in view of Launay (US 6,111,303) and Thompson et al. (US 5,335,276) and further in view of Ausems et al. (US 6,434,403).

With respect to claim 11, Ito, Launay and Thompson disclose all the limitations of the claims upon which the claim 11 depend. However, they do not specifically disclose an integrated cell phone wherein the cell phone is a PDA. In analogues art, Ausems et al. disclose this limitation (**See Ausems' abstract figure 2, col. 5 lines 48-65**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Ito, Launay, and Thompson by combining with the invention of Ausems, thereby providing an integrated cell phone and PDA, as disclosed by Ausems (**See Ausems' abstract figure 2, col. 5 lines 48-65**).

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAYED T. ZEWARDI whose telephone number is (571)272-6851. The examiner can normally be reached on 8:30-4:30.
10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sayed T Zewari/

Examiner, Art Unit 2617

August 12, 2008

/Lester Kincaid/  
Supervisory Patent Examiner, Art Unit 2617